



# United States Department of the Interior

M/047/013

BUREAU OF LAND MANAGEMENT

Utah State Office

324 South State, Suite 301

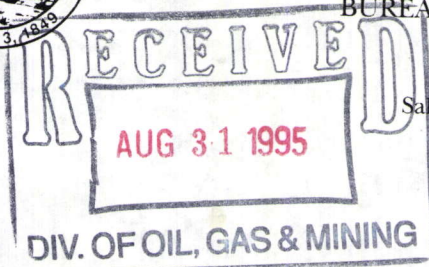
Salt Lake City, Utah 84111-2303

IN REPLY REFER TO:

3504

(UT-920)

UTU-0122693



AUG 28 1995

CERTIFIED MAIL—Return Receipt Requested

Ziegler Chemical & Mineral Corporation  
c/o Mr. Robert E. Covington  
P.O. Box 1845  
Vernal, Utah 84078

Re: Approval of Minor Modification to Drill Exploration Holes  
Cowboy-Bandana Mine Plan at Gilsonite Lease U-0122693

Dear Mr. Covington:

On July 10, 1995, the Bureau of Land Management (BLM) received a request for a minor modification to the approved Cowboy-Bandana mine plan. This minor modification includes drilling two 'NX exploration holes at the #1 shaft site location and deepening one hole at the #2 shaft site location. The location of these three holes has been observed by the Vernal District Office on August 8, 1995. This disturbance is covered as a cumulative impact under the existing Environmental Analysis.

The mine has run into problems and is unable to determine the location of the ore due to rock intrusions into the Gilsonite vein. Exploration from the surface is the most efficient way to determine the location of the ore in the vein. These holes will give the operator the opportunity to obtain the information necessary to modify the mine plan and continue operations.

## ADVISORY NOTICES:

1. As per 43 CFR 3593.1 (b), if any drilling encounters ground water, the lessee shall contact the Utah State Office within 24 hours, reporting the location of the drilling, drilling direction, hole angle, depth encountered, and the fact that the plugging methods enclosed will be utilized. The method of plugging holes which encounter water as well as those which are dry, as contained in State of Utah, Department of Natural Resources, Division of Oil, Gas, and Mining, Rule R647-3-108 (enclosure 1) is satisfactory to the BLM. Flowing water shall be sampled and analyzed as shown in enclosure 2 (provided by the Utah State Department of Environmental Quality, Division of Water Quality to BLM on May 2, 1995) by the lessee and the results filed with Karl Wright of the Vernal District and Stan Perkes of the Utah State Office. This must be accomplished within 30 days of encountering the water.

2. A minimum of one working-day before exploration commences, the lessee shall notify the BLM, Vernal District Office.



National Environmental Policy Act (NEPA):

This proposal does not increase the amount of surface acreage to be disturbed as part of the total operation in EA 1994-39, CX 1995-61 and in the approved mine plan and therefore is classified as a Categorical Exclusion, under 516 DM 6, Section 5.4 F (8), approved minor modification to mining plans.

BOND:

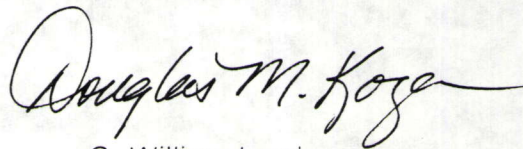
There are no additional bonding requirements for this action.

APPROVAL:

BLM authorizes Ziegler Chemical and Mineral Corporation to begin exploration drilling in Federal lease UTU-0122693 at the 1st and 2nd shaft sites after the new recommended bond amount, as stated in our decision dated August 18, 1995, has been accepted in writing by the BLM.

The BLM has determined that this minor modification to the mine plan to be in compliance with the Mineral Leasing Act of 1920 as amended, and the regulations at 43 CFR 3580, the lease terms and stipulations and will achieve Ultimate Maximum Recovery of the resource. There are no additions or deletions of the reserves due to this approval. If you have any questions, please contact Stan Perkes, Utah State Office, Bureau of Land Management, (801) 539-4036.

Sincerely,



G. William Lamb  
State Director

2 Enclosures

cc: Norman Haslam  
Ziegler Chemical and Mineral Corporation  
Star Route  
Vernal, Utah 84078

Gordon Ziegler, Jr.  
Ziegler Chemical and Mineral Corporation  
100 Jericho Quadrangle  
Jericho, New York 11753

Tony Gallegos  
Utah Division of Oil, Gas, and Mining

**R647-3- SMALL MINING OPERATIONS**

101. Filing Requirements and Review Procedures
102. Duration of the Notice of Intension
103. Notice of Intention to Commence Small Mining Operations
104. Operator(s) Surface and Mineral Owner(s)
105. Project Location & Map
106. Operation Plan
107. Operation Practices
- \* 108. Hole Plugging Requirements *same for exploration & large mining operations*
109. Reclamation Practices
110. Variance
111. Failure to Reclaim
112. Notification of Suspension or Termination of Operations
113. Mine Enlargement
114. Revisions
115. Transfer of a Notice of Intention
116. Reports
117. Practices and Procedures; Appeals
118. Confidential Information

**Forms to be used in conjunction with the Rules:**

- FORM MR-SMO Notice of Intention to Commence Small Mining Operations
- FORM MR-AR Annual Report of Mining Operations
- FORM MR-TRS Transfer of Notice of Intention - Small Mining Operations

**R647-3-101. Filing Requirements and Review Procedures.**

1. A Notice of Intention to Commence Small Mining Operations (FORM MR-SMO) or a letter containing all the required information must be filed with the Division before a small mining operation begins. It is recommended that the notice of intention be filed with the Division at least thirty (30) days prior to the planned commencement of operations.

Previously exempt mining operations, as defined by Rule R647-1-106, which have a disturbed area of five (5) acres or less and which will continue or resume mining operations, must submit a complete Notice of Intention to Commence Small Mining Operations (FORM MR-SMO) by April 29, 1989.

2. Within 15 days after receipt of a Notice of Intention, the Division will review the proposal and notify the operator in writing;

2.11. that the notice of intention is complete, or

2.12. that the notice of intention is incomplete, and that additional information as identified by the Division will be required.

3. The Division will review any subsequent filings of information within 10 working days of receipt.
4. A notice of intention to commence small mining operations will not require Division approval. However, all of the required information must be provided to the Division. Division approval is required for all variances from Rules R647-3-107, 108, and 109, regardless of the number of surface acres of disturbance planned.
5. Filing of the complete notice of intention shall enable the operator to conduct small mining operations. The operator is responsible for conducting mining and reclamation activities in compliance with the requirements of the notice of intention, the Act, and these Rules.
6. The operator must notify the Division no later than 30 days after beginning small mining operations.

**R647-3-102. Duration of the Notice of Intention.**

The notice of intention, including any subsequent amendments or revisions, shall remain in effect for the life of the small mining operation.

**R647-3-103. Notice of Intention to Commence Small Mining Operations.**

The notice of intention shall address the requirements of the following rules:

<u>RULE #</u>	<u>SUBJECT</u>
R647-3-104	Operator(s), Surface and Mineral Owner(s)
R647-3-105	Map
R647-3-106	Operation Plan
R647-3-107	Operation Practices
R647-3-109	Reclamation Practices
R647-3-110	Variance

**R647-3-104. Operator(s), Surface and Mineral Owner(s).**

The notice of intention shall include the following general information:

1. The name, permanent mailing address, and telephone number of the operator responsible for the small mining operation and reclamation of the site.



2. The name, and permanent mailing address of the surface landowner(s) and mineral owner(s) of all land to be affected by the mining operation.
3. The federal mining claim number(s), lease number(s) or permit number(s) of all mining claims, federal or state leases or permits included in the land affected.

#### R647-3-105. Project Location and Map.

A topographic base map showing the location of the proposed small mining operation must be submitted with the notice of intention. A USGS 7.5 minute series map is preferred. The areas to be disturbed should be plotted on the map in sufficient detail so that they can be located on the ground. It is recommended that the operator also plot and label any previously disturbed areas in the immediate vicinity of the proposed small mining operation for which the operator is not responsible.

#### R647-3-106. Operation Plan.

The operator shall provide a brief narrative description of the proposed mining operation as part of the notice of intention. The description should include the following information:

- A statement giving general details of the type or method of mining operations proposed, and the type of minerals to be mined;
- 2. Estimated width and length of any new roads to be constructed;
- 3. An estimate of the total number of surface acres to be disturbed by the mining operation.

#### R647-3-107. Operation Practices.

During operations, the operator shall conform to the following practices unless the Division grants a variance in writing:

1. Public Safety and Welfare - The operator shall minimize hazards to the public safety and welfare during operations. Methods to minimize hazards shall include but not be limited to:
  - 1.11. The closing or guarding of shafts and tunnels to prevent unauthorized or accidental entry in accordance with MSHA regulations;
  - 1.12. The disposal of trash, scrap metal and wood, and extraneous debris;

1.13. The plugging or capping of drill, core, or other exploratory holes as set forth in Rule R647-3-108.;

1.14. The posting of appropriate warning signs in locations where public access to operations is readily available;

1.15. The construction of berms, fences and/or barriers above highwalls or other excavations when required by the Division.

2. Drainages - If natural channels are to be affected by the mining operation, then the operator shall take appropriate measures to avoid or minimize environmental damage.

3. Erosion Control - Operations shall be conducted in a manner such that sediment from disturbed areas is adequately controlled. The degree of erosion control shall be appropriate for the site-specific and regional conditions of topography, soil, drainage, water quality or other characteristics.

4. Deleterious Materials - All deleterious or potentially deleterious material shall be safely removed from the site or left in an isolated or neutralized condition such that adverse environmental effects are eliminated or controlled.

5. Soils - Suitable soil material shall be removed and stored in a stable condition where practical so as to be available for reclamation.

6. Concurrent Reclamation - During operations, disturbed areas shall be reclaimed when no longer needed, except to the extent necessary to preserve evidence of mineralization for proof of discovery. Areas which have been disturbed but are not routinely or currently utilized shall be kept in a safe, environmentally stable condition.

#### \* R647-3-108. Hole Plugging Requirements.

Drill holes shall be properly plugged as soon as practical and shall not be left unplugged for more than 30 days without approval of the Division. The procedures outlined below are required for the surface and subsurface plugging of drill holes. The Division may approve an alternate plan, if the operator can prove to the satisfaction of the Division that another method will provide adequate protection to the groundwater resources and long term stability of the land. Dry holes and nonartesian holes which do not produce significant amounts of water may be temporarily plugged with a surface cap to permit the operator to re-enter the hole for the duration of the operations.



1. Surface plugging of drill holes shall be accomplished by:

- 1.11. Setting a nonmetallic permaplug at a minimum of five (5) feet below the surface, or returning the cuttings to the hole and tamping the returned cuttings to within five (5) feet of ground level. The hole above the permaplug or tamped cuttings will be filled with a cement plug. If cemented casing is to be left in place, a concrete surface plug is not required provided that a permanent cap is secured on top of the casing.
- 1.12. If the area is tilled farmland, a five (5) foot cement plug must be placed above a permaplug or tamped cuttings so that the top of the cement plug is a minimum of three (3) feet below the ground surface. The hole above the cement plug is to be filled with soil. If cemented casing is to be left in place, a concrete surface plug is not required provided that a permanent cap is secured on top of the casing. The top of the casing and cap must be a minimum of three (3) feet below the ground surface.
2. Drill holes that encounter water, oil, gas or other potential migratory substances and are 2 1/2 inches or greater in surface diameter shall be plugged in the subsurface to prevent the migration of fluid from one strata to another. If water is encountered, plugging shall be accomplished as outlined below:
  - 2.11. If artesian flow (i.e., water flowing to the surface from the hole) is encountered during or upon cessation of drilling, a cement plug shall be placed to prevent water from flowing between geologic formations and at the surface. The cement mix should consist of API Class A or H cement with additives as needed. It should weigh at least 13.5 lbs./gal., and be placed under the supervision of a person qualified in proper drill hole cementing of artesian flow. Artesian bore holes must be plugged in the described manner, prior to removal of the drilling equipment from the well site. If the surface owner of the land affected desires to convert an artesian drill hole to a water well, he must notify the Division in writing that he accepts responsibility for the ultimate plugging of the drill hole.
  - 2.12. Holes that encounter significant amounts of nonartesian water shall be plugged by:

2.12.111. Placing a 50 foot cement plug immediately above and below the aquifer(s); or

2.12.112. Filling from the bottom up (through the drill stem) with a high grade bentonite/water slurry mixture. The slurry shall have a Marsh funnel viscosity of at least 50 seconds per quart prior to the adding of any cuttings.

#### R647-3-109. Reclamation Practices.

During reclamation, the operator shall conform to the following practices unless the Division grants a variance in writing:

1. Public Safety and Welfare - The operator shall minimize hazards to the public safety and welfare following completion of operations. Methods to minimize hazards shall include but not be limited to:
  - 1.11. The permanent sealing of shafts and tunnels;
  - 1.12. The disposal of trash, scrap metal and wood, buildings, extraneous debris, and other materials incident to mining;
  - 1.13. The plugging of drill, core, or other exploratory holes as set forth in Rule R647-3-108;
  - 1.14. The posting of appropriate warning signs in locations where public access to operations is readily available;
  - 1.15. The construction of berms, fences and/or barriers above highwalls or other excavations when required by the Division.
2. Drainages - If natural channels have been affected by mining operations, then reclamation must be performed such that the channels will be left in a stable condition with respect to actual and reasonably expected water flow so as to avoid or minimize future damage to the hydrologic system.
3. Erosion Control - Reclamation shall be conducted in a manner such that sediment from disturbed areas is adequately controlled. The degree of erosion control shall be appropriate for the site-specific and regional conditions of topography, soil, drainage, water quality or other characteristics.
4. Deleterious Materials - All deleterious or potentially deleterious material shall be safely removed from the



site or left in an isolated or neutralized condition such that adverse environmental effects are eliminated or controlled.

5. Land Use - The operator shall leave the on-site area in a condition which is capable of supporting the postmining land use.
  6. Slopes - Waste piles, spoil piles and fills shall be regraded to a stable configuration and shall be sloped to minimize safety hazards and erosion while providing for successful revegetation.
  7. Highwalls - In surface mining and in open cuts for pads or roadways, highwalls shall be reclaimed and stabilized by backfilling against them or by cutting the wall back to achieve a slope angle of 45 degrees or less.
  8. Roads and Pads - On-site roads and pads shall be reclaimed when they are no longer needed for operations. When a road or pad is to be turned over to the property owner or managing agency for continuing use, the operator shall turn over the property with adequate surface drainage structures and in a condition suitable for continued use.
- Dams and Impoundments - Water impounding structures shall be reclaimed so as to be self-draining and mechanically stable unless shown to have sound hydrologic design and to be beneficial to the postmining land use.
10. Trenches and Pits - Trenches and small pits shall be reclaimed.
  11. Structures and Equipment - Structures, rail lines, utility connections, equipment, and debris shall be buried or removed.
  12. Topsoil Redistribution - After final grading, soil materials shall be redistributed on a stable surface, so as to minimize erosion, prevent undue compaction and promote revegetation.
  13. Revegetation - The species seeded shall include adaptable perennial species that will grow on the site, provide basic soil and watershed protection, and support the postmining land use.

Revegetation shall be considered accomplished when:

- 13.11. The revegetation has achieved 70 percent of the premining vegetative ground cover. If the premining vegetative ground cover of the disturbed area is unknown, then the ground cover of an adjacent undisturbed area that is representative of the premining conditions

will be used as a standard. Also, the vegetation has survived three growing seasons following the last seeding, fertilization or irrigation, unless such practices are to continue as part of the postmining land use; or

- 13.12 the Division determines that the revegetation work has been satisfactorily completed within practical limits; where reseeding has occurred and the vegetation has survived one growing season, the reseeded area shall not be included for purposes of determining whether a mining operation is a small mining operation.

#### R647-3-110. Variance.

1. The operator may request a variance from Rule R647-3-107, 108, or 109 by submitting the following information which shall be considered by the Division on a site-specific basis:
  - 1.11. The rule(s) as to where a variance is requested;
  - 1.12. The variance requested and a description of the area that would be affected by the variance;
  - 1.13. Justification for the variance;
  - 1.14. Alternate methods or measures to be utilized.
2. A variance shall be granted if the alternative method or measure proposed will be consistent with the Act.
3. Any variance must be specifically approved by the Division in writing.

#### R647-3-111. Failure to Reclaim.

If the operator of a small mining operation fails or refuses to conduct reclamation as required by the Act and these rules, the Board may, after notice and hearing, order that:

1. Reclamation be conducted by the Division; and
2. The costs and expenses of reclamation, together with costs of collection including attorney's fees, be recovered in a civil action brought by the attorney general against the operator in any appropriate court.

Water measurements for encountering water during drilling and/or mining.

Measurements	Reported As
Water level or Flow	Depth, CFS, CFM
pH	Standard Units
Total Dissolved Solids (TDS)	mg/L
Total Suspended Solids (TSS)	mg/L
Oil and Grease	mg/L
Aluminum (Total)	ug/L
Iron (Total)	ug/L
Antimony (Total)	ug/L
Arsenic (Total)	ug/L
Beryllium (Total)	ug/L
Cadmium (Total)	ug/L
Chromium (Total)	ug/L
Copper (Total)	ug/L
Mercury (Total)	ug/L
Nickel (Total)	ug/L
Seleium (Total)	ug/L
Silver (Total)	ug/L
Thallium (Total)	ug/L
Zinc (Total)	ug/L
Cyanide (Total)	ug/L
Phenols (Total)	ug/L